Arne Parish Council

Flood Plan

for the South Causeway (B3075) between Wareham and Stoborough.

Issue: 2.0 Date: 16.08.2024

Signatures:		
for Arne Parish Council:	(S. Cranshaw, Chairperson)	Date:
for Dorset Highways:		Date:
for the Police:		Date:

Note: updates to this document's annexes can be made under the authority/signature of just the Arne Parish Council's representative. Updates to the main body of this documents require the signature of all parties to this document. Any change to this document shall be done under a new issue number and date.

Contents

Abbreviations

Definitions

- 1. Introduction and Scope
- 2. Parties, Roles and Responsibilities
- 3. Declaration of a Flood Event and Associated Actions
- 3.1 Scenario 1: Dorset Highways Duty Engineer Available on Hotline
- 3.2 Scenario 2: Dorset Highways Duty Engineer NOT Available on Hotline
- **Annex 1: Contact Details**
- **Annex 2: Location and Contents of APC Flood Container**
- **Annex 3: Flood Barrier Deployment Procedure**
- **Annex 4: Flood Barrier Recovery Procedure**
- Annex 5: Risk Assessment for Volunteers and the Public Associated to the Deployment of Barriers and Road Warning Signs

Abbreviations

APC Arne Parish Council

APC FW APC Flood Warden

APC DFW APC Deputy Flood Warden

DC Dorset Council

DH Dorset Highways

DH DE Dorset Highways Duty Engineer

EA Environment Agency

WTC Wareham Town Council

Definitions

Resident(s)

Resident with a capital "R" is used in this document to represent a resident from one of the properties at risk of flooding close to where Corfe Road becomes the Causeway, i.e. numbers 1, 2, 4, 6, 8 and 10 Corfe Road.

Local Resources

The term Local Resources is used in this document to refer to local people, such as the Residents, APC Flood and Deputy Flood Wardens and other volunteers, prepared to help with the deployment and subsequent recovery of the Flood Barrier.

Flood Event:

A significant Flood Event is considered to be occurring when water across the Causeway road has risen to the point where it has reached an imaginary line drawn across the road between the opposing gates that are close to the SLOW markings on the road at the southern end of the Causeway (see images on the next page). Environment Agency survey measurements have shown that when the water reaches this point, then, at its deepest point, it is approximately 10 cm deep and will have spread some 350 meters along the road. This is then considered hazardous to traffic and pedestrians that might try to use the road. Additionally, road closure at this point still allows time for the deployment of traffic and flood barriers before residential flooding in Stoborough would become a possibility.



View South, looking towards Stoborough.



View North, looking towards Wareham.

1.0 Introduction

Extended periods of heavy rainfall cause the flood plains associated to the River Frome to flood. Particularly when such periods coincide with Spring tides, this flooding can rise to the point that the road between Wareham and Stoborough (the B3075), the Causeway, can become flooded, creating a hazard for pedestrians, bicycles and vehicles.

As a result the Causeway has to be closed to users. *

In the case of particularly extended heavy rainfall, the level of this flooding has the potential to flood properties at the southern end of the Causeway as it enters Stoborough.

The front and rear doors of these properties have been modified such that flood boards can, in the event of there being a threat of flooding to these properties, be mounted across the outside of these doors.

Additionally, a Flood Barrier, to further protect the front of these vulnerable properties, that can be deployed across the Causeway at the Stoborough end, is stored nearby in a container owned by the Arne Parish Council (APC).

There is no record/memory of flood depths or flow rates in and around these properties that would, in themselves, be likely to create a threat to life. The main direct impact of the ingress of flood water would be to personal belongings.

However, there are elderly and vulnerable people living in some of the properties for whom the presence of the water could create other factors that could, in their turn, give rise to life-threatening conditions. An example might be a localised power outage due to the flooding that might cause heating or some other life-maintaining equipment to stop working.

This Flood Plan is intended to define:

- Lines of responsibility with respect to the making of the necessary decisions in connection with potential or actual flooding events.
- Contact details for those involved in the making of these decisions.
- Procedures for the deployment of the Flood Barrier.

with respect to flooding in the area of the Causeway between Wareham and Stoborough.

It often takes a combination of events to give rise to flooding serious enough to put users of the Causeway or local properties at risk, making it difficult to reliably predict the extent of likely flooding. Bearing in mind that the River Frome is, in the area of Wareham, tidal, these include:

^{*} This is not too big an inconvenience for motorised transport because of the possibility to travel between

Wareham and Stoborough via the Wareham bypass (the A351).

- Preceding rainfall and not just in the Wareham locality, but also along the River Frome upstream of Wareham,
- Forecast of upcoming heavy and extended rainfall, again not just in the Wareham area, but also upstream along the Frome, bearing in mind that the effects of upstream rainfall can take a number of hours or more to impact the Wareham area.
- Tidal status (e.g. closeness to Spring, rather than Neep, tides significantly exacerbates the risks).
- Wind strength and direction, in particular south-easterly gales that tend to hold up the water level in Poole Harbour.

The Wareham to Stoborough Causeway is not the only place within the Arne Parish for potential flooding to occur. Separate Flood Plans for these other potential flood locations will be prepared as seen necessary. Nevertheless, the general guidance is as follows:

- With regard to flooding on a highway, the APC (Deputy) Flood Warden should be contacted such that he/she can, in turn, contact the DH DE.
- In the case of property flooding, contact the APC Flood Warden so that he/she can help coordinate assistance.

2. Parties, Roles and Responsibilities

In the event of flooding, the primary responsibilities are as follows:

Only Dorset Highways and the Police have the authority to close a road. In the case of flooding on a road, it would normally be Dorset Highways that authorise its closure.

It is the responsibility of the owners of the properties at risk of flooding to protect their properties from flooding. However there are a number of agencies and organisations that can provide assistance in situations where such property-flooding is threatened.

The following is intended to outline how these different groups would interact in the case of flooding on the Causeway between Wareham and Stoborough (B3075).

Residents of 1, 2, 4, 6, 8, 10 Corfe Road

The properties at the southern end of the Causeway at risk of flooding are no.s 1, 2, 4, 6, 8 and 10.

It is not surprising that, in the light of this risk, the Residents of these properties keep a close eye on the water level across the nearby flood plain and on the Causeway and it is therefore normally one of these Residents that are the first to spot water flooding over the road.

On observing such an event, the Resident should contact the APC (Deputy) Flood Warden informing him/her of the situation. Depending on the degree of flooding reported, the APC (Deputy) Flood Warden will contact the DH Duty Engineer seeking a decision from the DH Duty Engineer to authorise the closure of the Causeway. If closure is authorised, the APC (Deputy) Flood Warden will contact other Local Resources (e.g. the Residents and volunteers) for assistance in the deployment of the Flood Barrier.

Note, the Flood Barrier cannot be put in place across the southern end of the Causeway until the Causeway has been officially closed and the traffic barriers placed across both the North and South ends of the Causeway.

Circumstances are conceivable whereby the DH Duty Engineer cannot be contacted (for example, he has become overloaded by incidents elsewhere in the County). If this occurs and noting that the only other organisation that has the authority to close a public highway is the Police, the APC (Deputy) Flood Warden should dial 999, asking for the Police, and explain the situation to the Police with the hope that they will authorise closure of the Causeway.

The APC (Deputy) Flood Warden shall inform DH DE of the Police's decision to close the Causeway.

A further conceivable scenario is where the DC Duty Engineer is contactable by the APC (Deputy) Flood Warden, is able to authorise the closure of the Causeway, but all his Highway Teams are busy. As a consequence, the Duty Engineer might well give the Causeway closure authorisation, but suggest that Local Resources deploy both the traffic and flood barriers and road signs.

Arne Parish Council (APC) and the APC Flood Warden

The Causeway between Wareham and Stoborough and the village of Stoborough, itself, lie within the Parish of Arne. Having a strong sense of responsibility for its parishioners, APC puts a high priority on the monitoring of and ensuring a positive response to flooding events impacting its residents.

In view of the known flood risk in the area of the Causeway, the APC have nominated both a Flood Warden and a Deputy Flood Warden who are their first points of contact with regard to flooding matters both for their Parishioners and with regard to the other agencies identified in this section.

In the case that flooding is noted within the Parish that might have impact on road users and/or properties and their residents, the APC (Deputy) Flood Warden should be informed and his/her advice sought with regard to the response that should be made to that flooding.

APC have procured a Flood Barrier, which is stored in a container along the private lane in front of the property 2 Corfe Road, that can be put across the Causeway in the event of flooding to help protect the properties at the southern end of the Causeway from water ingress. However, this cannot be deployed until the Causeway has been officially declared closed and the associated traffic barriers put in place.

Dorset Highways (DH)

Dorset Highways (DH) is a department of Dorset Council (DC). DH have the authority to close a road if users are at risk and it is DH that would normally make the decision to close the Causeway due to it being flooded.

In making the decision to close the Causeway, DH might well consult the Environment Agency (EA) with respect to weather conditions, both current and predicted, but nevertheless, the decision comes from DH.

DH have a Duty Engineer (DE), available 24/7 on a "hotline", who can be contacted by the APC (Deputy) Flood Warden to discuss the need to close the Causeway as a result of observed flooding across it.

When the decision is made by DH to close the causeway, the APC (Deputy) Flood Warden shall be informed.

Upon authorising the closure of the Causeway, the Duty Engineer will organise the despatch of a team to place the traffic barriers at either end of the Causeway and the associated traffic warning signs at the various road junctions in the area.

The team despatched to put in place the traffic barriers and road signs will endeavour to assist the Local Resources to deploy the Flood Barrier.

It is similarly Dorset Highway's responsibility to authorise the reopening of the Causeway. When they consider that the flooding situation has retreated sufficiently that there remains no threat with respect to water on the Causeway, DH will authorise its reopening and send a team to remove the traffic barriers and the traffic warning signs. This team will endeavour to assist with the recovery of the Flood Barrier.

Police

The Police also have the authority to close a road. In the case that the DH DE is so busy with other incidents that he is unable to take a call on the "hotline" regarding flooding on the Causeway and therefore cannot authorise its closure, it may be an alternative to contact the Police via calling 999 and requesting them to authorise its closure.

Wareham Town Council (WTC)

The northern end of the Causeway meets the boundary of the Wareham Town Council (WTC) area. In the case of closure of the Causeway, traffic within and around Wareham would be impacted and the Traffic Barriers to be placed at the northern end of the Causeway would be close to or within the WTC area. WTC need therefore to be informed of the decision to close the Causeway, but would not normally participate in the decision making process.

The traffic barriers and signs used in the process of closing the Causeway are held by WTC. They also maintain a highways team during normal working hours. In the case that the DH DE authorises closure of the Causeway, it maybe that the Team despatched to deploy the traffic barriers and signs is this WTC team rather than a DH team.

TBD within the WTC will be informed by DH Duty Engineer (or the APC Flood Warden) of the decision to close the Causeway.

Environment Agency (EA)

The Environment Agency is a Government agency with the objectives of working with businesses and other organisations to manage the use of resources, increase the resilience of people, property and businesses to the risks of flooding and coastal erosion and to protect and improve water, land and biodiversity.

In the context of this Flood Plan, the EA issues Flood Alerts indicating the potential for flooding in the specified area in the upcoming period.

3. Declaration of a Flood Event and Associated Actions

3.1 Scenario 1: Dorset Highways Duty Engineer Available on Hotline

Dorset Council Highways are, under nominal circumstances, responsible for making decisions with respect to the response that will be made to a flood threat/situation and then to actually implement that chosen response. Dorset Council Highways have a 24/7 Duty Engineer who can be contacted via a "hotline" and who is the focus for the making of these decisions. Although receiving information from other agencies, the Duty Engineer is often alerted to a new flood situation via a call from the general public on the "hotline". In the case of the Causeway becoming flooded, and because of their obvious concern with regard to the potential consequences, it is often one of the Residents that first takes note of flood water on the Causeway. In such a case, the Resident should contact the APC (Deputy) Flood Warden who, in turn, will inform DH DE of this via the "hotline".

This case, where the DH DE is in a position to take charge, is referred to hereafter as the Baseline Flood Procedure. For this case, see the following flowchart, Figure 1.

3.2 Scenario 2: Dorset Highways Duty Engineer NOT Available on Hotline

In the case of there being a large number of simultaneous flood threats across the county, it can happen that the Duty Engineer becomes overloaded and is unavailable when attempts are made to contact him on the "hotline".

In this case, it is recommended to contact the Police by calling 999, seeking their authorisation to close the Causeway. This is referred to hereafter as the Back-Up Flood Procedure. For this case, see the following flowchart, Figure 2.

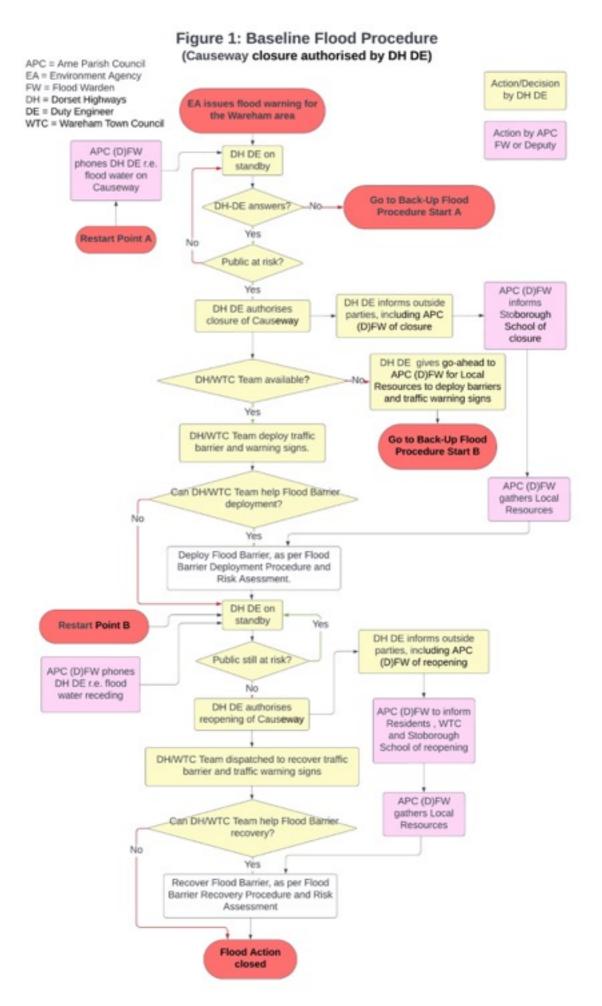
NOTE: This scenario should not be invoked unless the following resources are known to be available:

- enough manpower to allow the north Causeway end and south Causeway end traffic barriers to be deployed simultaneously,
- high-viz jackets for the workers,
- the availability of transport to take volunteer(s), the necessary traffic barrier elements
 plus road signs for positioning by the traffic lights in Wareham, via the Wareham bypass, to the northern end of the causeway,
- and the means of communicating between the north Causeway end and south Causeway end traffic barrier deployment teams so that both barriers can be deployed simultaneously.

The following gives details concerning the road signs, types and locations, that need to be deployed in connection with the deployment of the traffic barriers at either end of the Causeway as a result of flooding on the Causeway:

- Together with the traffic barrier(s) at the northern end of the Causeway, a road sign with the text "Flooding: Road Closed".
- Together with the traffic barrier(s) at the southern end of the Causeway, a road sign with the text "Flooding: Road Closed".
- On the Wareham North roundabout, a road sign with the text "Flooding: No Access to Stoborough".

- On the traffic lights in the centre of Wareham, a road sign with the text "Flooding: No Access to Stoborough".
- On the roundabout on the A351 (Wareham bypass) with the road to Wool.
- On the junction between West Lane and Corfe Road close to the Stoborough Primary School, a road sign with the text "Flooding: No Access to Wareham".
- On the junction between West Lane and the A351 (Wareham bypass), a road sign with the text "Flooding: No Access to Wareham".
- On the roundabout at the southern end of Corfe Road, a road sign with the text "Flooding: No Access to Wareham"



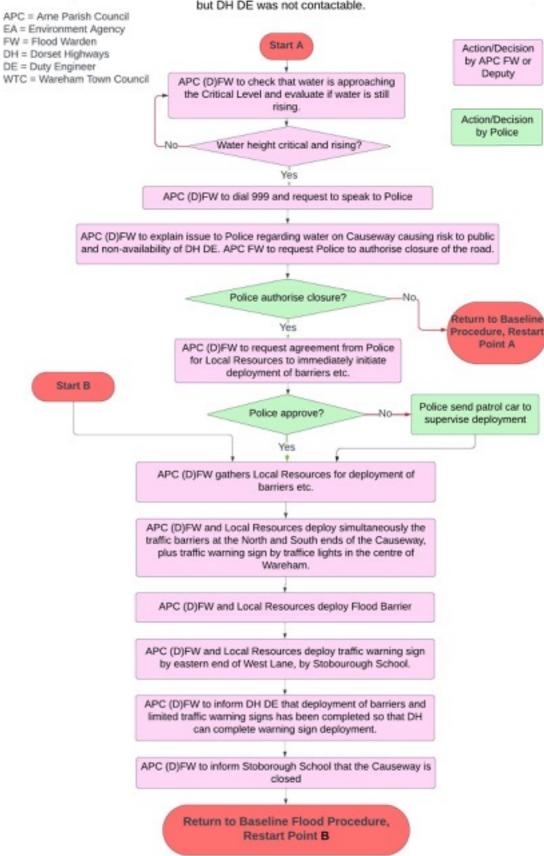
Page 13 of 27

Figure 2: Back-Up Flood Procedure

(Causeway closure authorised by Police)

This procedure assumes that:

- 1. The APC Flood Warden has been notified that there is flood water over the Causeway.
- Attempts have been made to contact the DH DE to warn him of flood water over the Causeway, but DH DE was not contactable.





Annex 1: Contact Details

Local Residents:

2 Corfe Road: 01929 556648 6 Corfe Road (Debbie): 01929 550203

APC Flood Wardens:

Tim Brodie-James: Mobile: 07718585182

Email: <u>timbrodiejames@gmail.com</u>

APC Deputy Flood Wardens:

John Ives Landline: 01929 552487 *

Mobile: 07867975119

Email: john.c.ives@btopenworld.com

Debbie ?: Landline: 01929 550203

Dorset Council

Dorset Highways Duty Engineer: 07730700751 *

Dorset Highways: 01305 221020

Wareham Town Council

WTC contact to be informed in case of Causeway closure/reopening: TBD

UK Government Flood Line

Website: https://check-for-flooding.service.gov.uk/

Landline: 0345 988 1188

You can also sign-up for 24/7 flood warnings at https://www.gov.uk/sign-up-for-flood-warnings.

Stoborough School

In the case of the Causeway being closed and also when it is reopened, the number below should be called to inform Stoborough School of the change so that they can pass the information on to parents. If possible, particularly in the case of overnight closure, this information should reach the school by 08:15 in the morning. If the call is not answered, please leave a message.

Stoborough School contact phone number: 01929 552974

* Preferred contact means.

Tidal Information

Go to the website https://easytide.admiralty.co.uk/ and type into the search box "Wareham (River Frome)" and tidal information will be shown on the screen for the next seven days.

Flood Barrier Manufacturer

Website: https://www.emtez.co.uk/

Landline: 01506 430309 Email: info@emtez.co.uk

Annex 2: Location and Contents of the APC Flood Container



APC Flood Container entry code = 1941

The following lists the items associated to the deployment of the APC Flood Barrier. They are stored inside the container unless otherwise stated.

As of the 6th February 2024:

Signs:

- 3 x "Road Closed" signs (red, rectangular)
- 1 x "Flood" sign (red, triangular)
- 1 x "Danger Flood, Hidden Obstruction" sign (yellow, rectangular)
- 3 x Traffic Cones (one at the side of the container)
- 2 x Traffic Barriers (At the side of the container. Red, with reflectors on one side to face oncoming traffic)
- 2 x Traffic Barriers (Beside entrance to the Kings Arms pub. Red, with reflectors on one side to face oncoming traffic)
- 1 x "Road Closed" sign (Beside entrance to the Kings Arms pub. Red, rectangular)
- 1 x "Flood" sign (Beside entrance to the Kings Arms pub. Red, triangular)

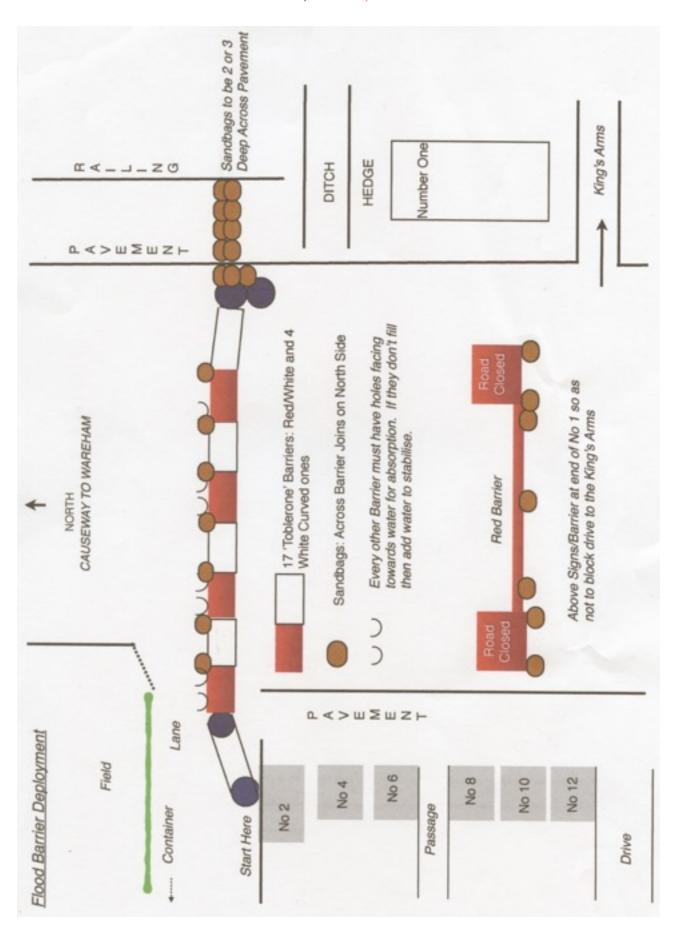
Barrier Components and related items:

- 11 x red "Toblerone" sections
- 9 x white "Toblerone" sections
- 6 x white semi-circular sections
- 25 x black joining elements
- "Hook", to assist removal of the black joining elements
- 40+ sandbags
- Watering can and funnel, for filling barrier sections with water
- 2 x high vis jackets
- Gloves, for use when carrying barrier elements
- Trolley, to aid carrying items from storage to usage site and back.

Annex 3: Flood Barrier Deployment Procedure

The diagram on the next page gives details on how the Flood Barrier should be deployed. The page after includes some images of the deployed Flood Barrier. The following should also be taken into account in its deployment:

- Deployment needs to begin at the 'far' side of No. 2's front door, working across to the pavement on the opposite side of the road.
- The Blue Circles have been used to denote the curved white barrier elements, to clarify the schematic.
- Some of the barriers have holes close to their bases which enable them to automatically fill with flood water thereby avoiding the tendency for the barrier to float away.
- The white barrier elements nearest the pavement edge should be ones without holes near their base. They should be filled via the top holes with the watering can and funnel provided in the container.
- Black 'joiners' are inserted between the barrier elements with their hooks facing up both to seal the elements together and to hold the whole overall structure together.
- Unused sandbags can be placed on the top of the 'Toblerone' elements to help hold the completed barrier from being moved by the rising water.
- A trolley is available to help transport the elements from the container to their usagesite.
- This procedure should be implemented in conjunction with the Risk Assessment in Annex 5 of the Flood Plan.









Annex 4: Flood Barrier Recovery Procedure

Recovery of the Flood Barrier is effectively the reverse of the deployment.

- The black 'joiners' are removed with the use of the 'hooked' handle stored on the container wall.
- A trolley is available to help transport the elements back to the container.
- This procedure should be implemented in conjunction with the Risk Assessment in Annex 5 of the Flood Plan.

•

Annex 5: Risk Assessment for Volunteers and the Public Associated to the Deployment of Barriers and Road Warning Signs

Task	Setting out barriers and warning signs during periods of severe flooding
Who is at risk?	Volunteers and the public

Hazard	Control Measures	Risk *

